“Sudden Impact” Design folio booklet

Design brief

**You are to design and produce, for example, clothes and buildings, to take into account extreme conditions such as fire, cyclones and earthquakes.**

***OR***

**You are to design and produce equipment/food that would assist people in the aftermath of a natural disaster.**

**Name**: \_ \_\_\_\_\_\_\_\_\_\_\_\_Anna and Gabby\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Cat suit UOI 2011DESIGNING

Designing options

Use the next three pages to develop three designs for your ideas. Remember your designs must include at least two materials and at least two different joining methods. Label each design to show:

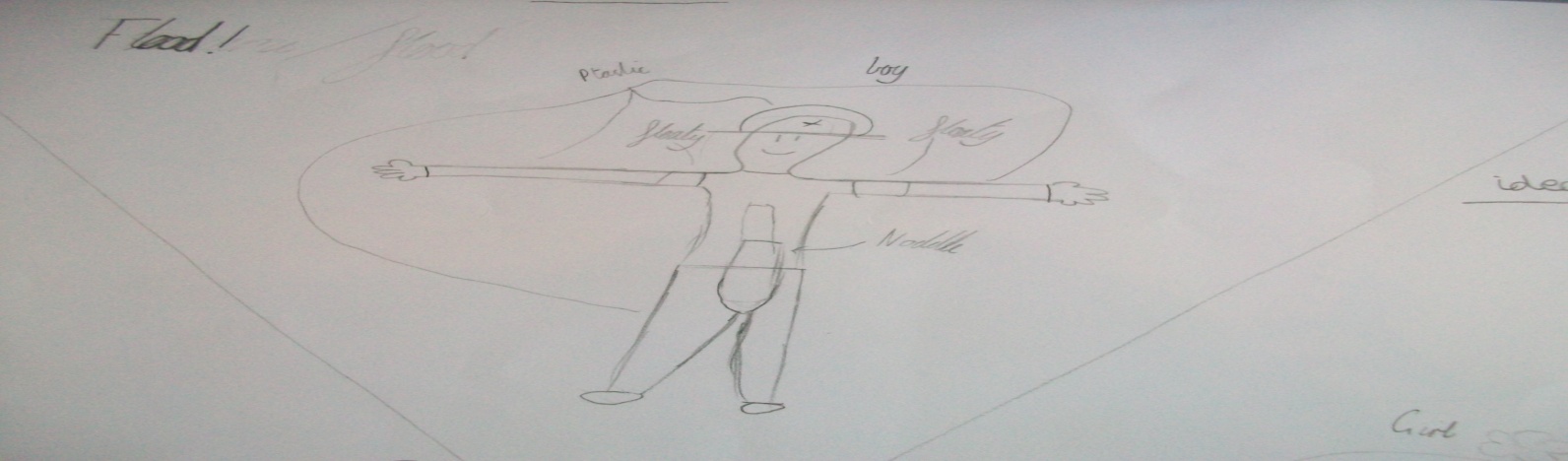
• the different parts of the design

• how the parts will be joined

• how it will be used (use arrows to show the important information)

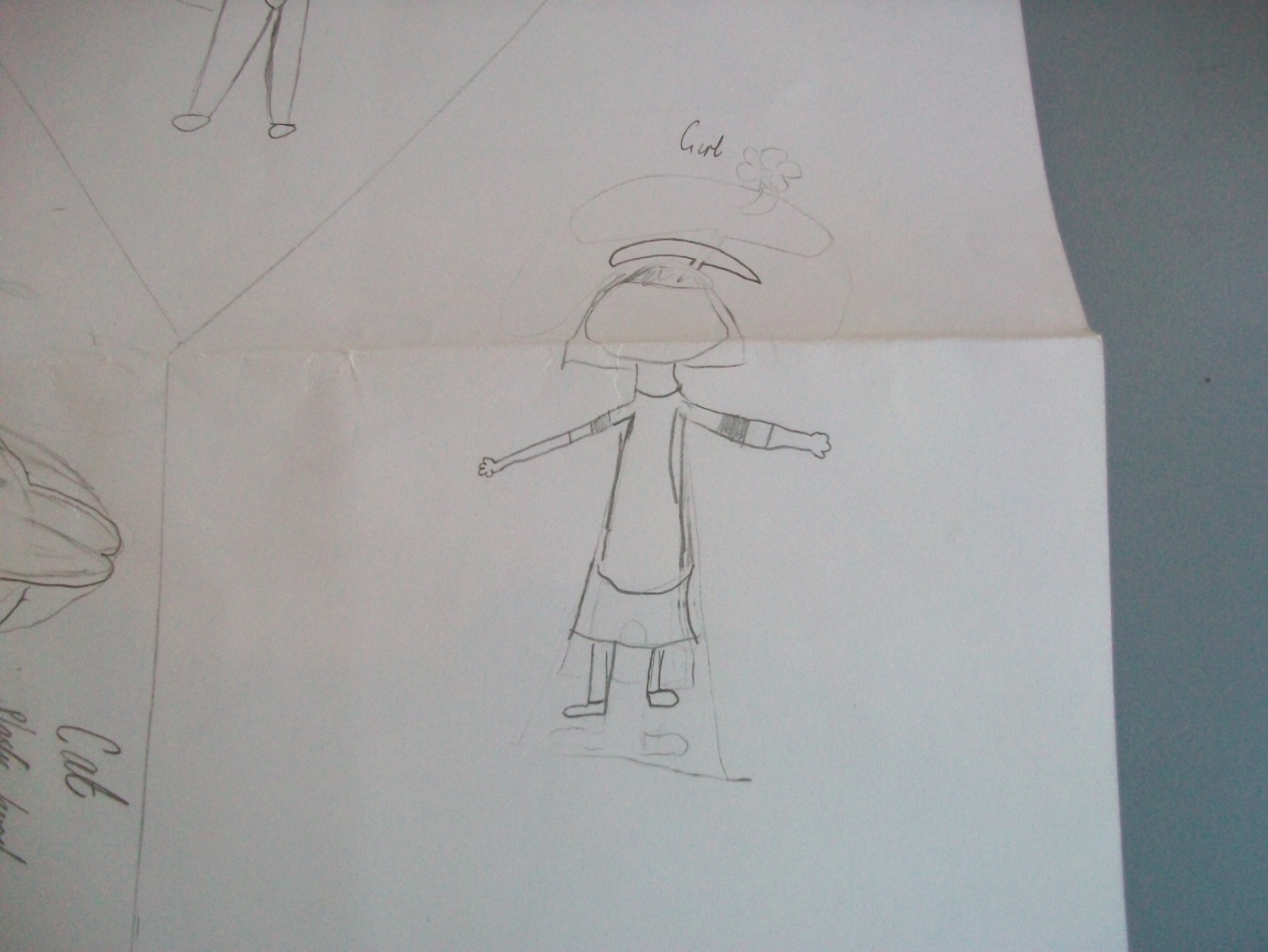
• the materials.

Design idea 1

Design idea 2



Design idea 3

Selecting and justifying the best design

Which design have you chosen? (Write the number.) Why did you choose this design?

Listing the materials

In the boxes below list the materials you chose and why you chose them. Remember that you must use at least two materials. Don’t forget to list joining materials (glues etc) too.

|  |  |
| --- | --- |
| Write one material in each box. | Why did you choose this material? |
| Needle and string | To sew it together |
| Waterproof material | So the cat won’t get wet |
| foam | So the cat can float |
| Stud buttons | To clip the outfit together |
| scissors | To cut the fabric |
| goggles | To cover the eyes |

* Developing a plan

Write a step-by-step plan of how you will make your design including the tools and equipment that you will use.

Remember that you need to use at least two joining methods and materials use levers.

|  | Write the steps here. | In this column list the tools and equipment you will use. |
| --- | --- | --- |
| Step 1 | Measure cat and cut out material with measurement | Cat  Scissors  Material  Measuring tape |
| Step 2 | Sew the Velcro onto the suit | Velcro  Needle and string  fabric |
| Step 3 | Sew the foam onto the fabric | Foam  Needle and string  fabric |
| Step 4 | Test to see if it can withstand a flood | Suit  Bath  Water  cat |

Developing a plan (continued)

On this and the next page, list the changes you made to your designs and the design, and explain why they were made. You don’t have to fill in every box. Just use as many as you need.

| Changes made to your drawings/designs | Changes made to your design |
| --- | --- |
| Date:27/5/11  Change/s made:  Velcro instead of buttons  Reasons for changes made:  Buttons would rust | Date:25/5/11  Change/s made:  No hood for cat  Reasons for changes made:  Head is too fragile |
| Date:26/5/11  Change/s made:  No goggles  Reasons for changes made:  No hood |  |

Testing and evaluating the design (finished)

Compare the drawing of your finished design with your first drawing. List the things that are different and say why you made changes.

|  |  |
| --- | --- |
| List the things that are different. | Do you think the changes you made to your design made it better? Why? |
| Buttons to Velcro | It was better. We took a risk and thought it would get wreaked by the water but it turns out to be good. Also it was easier to sew on. |
| Fabric | We had wetsuit material at first but it absorbs water. We went for a similar one but it was a little thin |
| No headpiece | We had a little hood at the start but we thought that the head was to fragile. |
|  |  |
|  |  |
|  |  |

Look back at the materials you said you would use. Did you use the same materials? Why/why not?

Testing and evaluating the design (continued)

Do you think the materials you used were good materials to use? Why/why not?

We had lots of trouble finding the right materials. We thought the buttons would rust and Velcro would get wrecked by the water. We took a risk with using Velcro and have turned out well. We also had trouble with the material. We were going to use wetsuit material but it absorbs water which would get the cat wet and also wreak the foam. We went for the closest material that will be waterproof and it has been alright.

Are there changes you could now make to your design that would make it better?

We would like to change and get a better material for the cat because it is slightly thin.